In the Claims:

Claim 1. (Previously presented) A process for sealing at least one polymeric material to a polymeric catheter tube, comprising the steps of:

providing a catheter tube having a first predetermined bonding location and a second predetermined bonding location for bonding a polymeric material thereto, each bonding location separate from each other and having a polymeric material overlapping the catheter tube at the bonding location;

simultaneously generating a first and a second annular beam of electromagnetic energy from two separate energy sources, the first beam being at least partially absorbable at a selected energy wavelength by at least one of the polymeric material at the first bond site location and the catheter tube and the second beam being at least partially absorbable at a selected energy wavelength by at least one of the polymeric material at the second bond site location and the polymeric catheter tube;

controllably directing the first annular beam of electromagnetic energy by redirecting the first beam with a parabolic mirror onto the polymeric material to concentrate the energy in the first bond site location so as to at least partially melt at least one material selected from the group consisting of the polymeric material and the polymeric catheter tube along the first bond site location and immediate regions thereof;

and controllably directing the second annular beam of electromagnetic energy by redirecting the second beam with a parabolic mirror onto the polymeric material to concentrate the energy in the second bond site location so as to at least partially melt at least one material selected from the group consisting of the polymeric material and the polymeric catheter tube along the second bond site location and the immediate region thereof; and

allowing the at least two partially melted materials to cool and solidify to form a fusion bond between the polymeric catheter tube and the polymeric material.

Claim 2. (Previously presented) The process of claim 1 wherein the polymeric material is a polymeric balloon material.

Claim 3. (Previously presented) The process of claim 2 wherein the energy is substantially monochromatic.

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Claim 4. (Previously presented) The process of claim 2 wherein the energy is not substantially monochromatic.

Claim 5. (Previously presented) The process of claim 2 wherein the energy is at least partially absorbed by the polymeric balloon material and the polymeric catheter tube.

Claim 6. (Previously presented) The process of claim 2 wherein at least two annular beams of electromagnetic energy are generated.

Claim 7. (Previously presented) The process of claim 6, the polymeric balloon material having a proximal end and a distal end, wherein a first annular beam is directed at the proximal end of the polymeric balloon material and a second annular beam is directed at the distal end of the polymeric balloon material.

Claim 8. (Previously presented) The process of claim 7 wherein the first annular beam is directed to the proximal end of the polymeric balloon material at the same time that the second beam is directed to the distal end of the polymeric balloon material.

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Claim 9. (Previously presented) The process of claim 2 wherein the polymeric balloon material is formed from a polymer selected from the group consisting of: polyesters, polyolefins, polyamides, thermoplastic polyurethanes and their copolymers, polyethylene terephthalate, nylon, and combinations thereof.

Claim 10. (Previously presented) The process of claim 2 wherein the energy is at least partially absorbed by the polymeric balloon material causing the polymeric balloon material to at least partially melt.

Claim 11. (Previously presented) The process of claim 2 wherein the energy is at least partially absorbed by the polymeric catheter tube causing the polymeric catheter tube to at least partially melt.

Claim 12. (Previously presented) The process of claim 2 wherein the energy is at least partially absorbed by the polymeric catheter tube causing the polymeric catheter tube to at least partially melt and by the polymeric balloon material causing the polymeric balloon material to at least partially melt.

Claim 13. (Previously presented) The process of claim 1 wherein the polymeric material is a retention sleeve.

Claims 14-15. (Canceled)

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Claim 16. (Previously presented) The process of claim 1 wherein the annular beam is not substantially circular.

Claims 17-33. (Canceled)

Claim 34. (Currently amended) The process of claim 1 wherein after being generated the annular beam is redirected by passing through ~~at least one lens~~ a lens.

Claim 35. (Canceled)

Claim 36. (Currently amended) The process of claim 1 wherein each annular beam is generated and directed through the use of ~~at least one lens~~ a lens.

Claim 37. (Currently amended) The process of claim 36 wherein each annular beam is generated and directed through the use of two ~~or more~~ lenses.

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Claim 38. (Previously presented) The process of claim 1 wherein a portion of the annular beam is blocked.

Claims 39. (Currently amended) A process for sealing at least one polymeric material to a polymeric catheter tube, comprising the steps of:

over-lapping a portion of the at least one polymeric material with a portion of the polymeric catheter tube thereby creating an over-lapped portion, the polymeric catheter tube having a longitudinal axis;

generating a first beam of substantially annular electromagnetic energy ~~which is substantially annular~~ without impinging on the polymeric material or the polymeric catheter tube, the electromagnetic energy substantially continuous in the annular direction, the electromagnetic energy at least partially absorbable by at least one of the polymeric material and the polymeric catheter tube at a selected energy wavelength;

controllably redirecting the first beam of electromagnetic energy such that it converges onto the polymeric material at an over-lapped portion circumscribing the catheter tube to at least partially melt at least one material selected from the group consisting of the polymeric material and the polymeric catheter tube along at least a portion of the overlapped portion.

Claim 40. (Previously presented) The process of claim 39, wherein a second beam of electromagnetic energy which is substantially annular is generated, the electromagnetic energy substantially continuous in the annular direction, the electromagnetic energy at least partially

absorbable by at least one of the polymeric material and the polymeric catheter tube at a selected energy wavelength;

controllably directing the second beam of electromagnetic energy such that it converges onto the polymeric material in a bond site on the over-lapped portion circumscribing the catheter tube to at least partially melt at least one material selected from the group consisting of the polymeric material and the polymeric catheter tube along the bond site and the immediate region thereof; and

Claim 41. (Previously presented) The process of claim 39, wherein there is a plurality of annular beams, each annular beam to be directed to a bonding location is substantially disposed about the longitudinal axis of the catheter tube.

Claim 42. (Previously presented) The process of claim 39, wherein the annular beam has a substantially uniform distribution annularly.

Claim 43. (Previously presented) The process of claim 39 wherein the polymeric material is a sheath or catheter tube.

Claim 44. (Previously presented) The process of claim 43, the polymeric material having a proximal end and a distal end, wherein a first annular beam is directed at the proximal end of the polymeric material and a second annular beam is directed at the distal end of the polymeric material.

Claim 45. (Previously presented) The process of claim 44 wherein the first annular beam is directed to the proximal end of the polymeric material at the same time that the second beam is directed to the distal end of the polymeric material.

Claim 46. (Previously presented) The process of claim 39 wherein the polymeric material forming the body is selected from a group of polymeric materials consisting of: polyesters, polyolefins, polyamides, thermoplastic polyurethanes and their copolymers.

Claim 47. (Currently amended) The process of claim 39 wherein the annular beam is generated and directed through the use of ~~at least~~ two lenses.

Claim 48. (Currently amended) The process of claim 39 wherein after being generated the annular beam is redirected by passing through ~~at least one~~ a lens.

Claim 49. (Currently amended) The process of claim 39 wherein after being generated the annular beam is redirected by striking ~~at least one~~ a mirror.

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Claim 50. (Previously presented) The process of claim 39 wherein the energy is substantially monochromatic.

Claim 51. (Previously presented) The process of claim 39 wherein the at least one partially melted material is allowed to cool and solidify to form a seal or bond between the polymeric catheter tube and the polymeric material.

Claim 52. (Currently amended) A process for simultaneously bonding at least two polymeric materials to a catheter tube comprising the steps of:

providing a catheter tube having a longitudinal axis, the catheter tube having at least a first overlapped portion and a second overlapped portion, each overlapped portion having a polymeric material circumscribing the catheter tube;

simultaneously generating a first annular beam of electromagnetic energy that is at least partially absorbable by the polymeric material at the first overlapped portion and a second annular beam of electromagnetic energy that is at least partially absorbable by the polymeric material at the second overlapped portion, each annular beam <u>directed without impinging on the polymeric material or the polymeric catheter tube and</u> to be directed to an overlapped portion substantially disposed about the longitudinal axis of the catheter tube;

controllably redirecting the first annular beam of electromagnetic energy such that it converges onto the polymeric material at the first overlapped portion circumscribing the catheter tube and at least partially melts the polymeric material along at least a portion of the first overlapped portion and simultaneously controllably redirecting the second annular beam of electromagnetic energy such that it converges onto the polymeric material at the second overlapped portion circumscribing the catheter tube and at least partially melts the polymeric material along at least a portion of the first overlapped portion.

Claim 53. (Previously presented) The process of claim 52 wherein the polymeric material circumscribing the catheter tube at the first and second overlapped portions is polymeric balloon material.

Claim 54. (Previously presented) The process of claim 52 wherein the previously melted polymeric materials in the first and second overlapped portions is allowed to cool and solidify to form seals or bonds between the catheter tube and the polymeric material at the first and second overlapped portions.

Claim 55. (Currently amended) A process for bonding at least one polymeric material to a polymeric catheter tube having a longitudinal axis extending beyond each end of the polymeric catheter tube, comprising the steps of:

over-lapping a portion of the at least one polymeric material with a portion of the polymeric catheter tube thereby creating an over-lapped portion;

generating an annular beam of electromagnetic energy such that the annular beam is disposed about the longitudinal axis of the polymeric catheter tube without impinging on the polymeric material or the polymeric catheter tube, the electromagnetic energy at least partially absorbable by at least one of the polymeric material and the polymeric catheter tube at a selected energy wavelength;

controllably redirecting at least a portion of the annular beam of electromagnetic energy such that it converges onto the polymeric material at the over-lapped portion circumscribing at least a portion of the polymeric catheter tube to at least partially melt at least one material selected from the group consisting of the polymeric material and the polymeric catheter tube along at least a portion of the overlapped portion.

Claim 56. (Previously presented) The process of claim 55, wherein there is a plurality of annular beams, each annular beam to be directed to the overlapped portion is substantially disposed about the longitudinal axis of the catheter tube.

Claim 57. (Previously presented) The process of claim 55 wherein the polymeric catheter tube in the region of the overlapped portion has a circular cross-section.

Claim 58. (Previously presented) A process for sealing at least one polymeric material to a polymeric catheter tube, comprising the steps of:

over-lapping a portion of the at least one polymeric material with a portion of the polymeric catheter tube thereby creating an over-lapped portion, the polymeric catheter tube having a longitudinal axis;

generating a beam of electromagnetic energy which is substantially annular, the electromagnetic energy substantially undivided in the annular direction, the electromagnetic energy at least partially absorbable by at least one of the polymeric material and the polymeric catheter tube at a selected energy wavelength;

controllably redirecting the annular beam of electromagnetic energy such that it converges onto the polymeric material at the over-lapped portion circumscribing the catheter tube to at least partially melt at least one material selected from the group consisting of the polymeric material and the polymeric catheter tube along at least a portion of the overlapped portion.

Claim 59. (Previously presented) The process of claim 58, wherein the annular beam has a substantially continuous and a substantially uniform distribution annularly.

Claim 60. (Previously presented) The process of claim 58, wherein the at least one partially melted material is allowed to cool and solidify to form a seal or bond between the polymeric catheter tube and the polymeric material.